UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR-6J

January 26, 2016

Mr. Gary D. Uphoff
Principal
Environmental Management Services Company
5934 Nicklaus Drive
Fort Collins, Colorado 80528

Subject: Old American Zinc (OAZ) Superfund Site, Fairmont City, Illinois
Preliminary Design Report dated December 2015

Dear Mr. Uphoff:

The United States Environmental Protection Agency (EPA) has reviewed the Preliminary Design Report dated December 2015 for the Old American Zinc Plant Site in Fairmont City, Illinois. EPA's comments are enclosed.

Please submit a Draft Final Design that incorporates all EPA's comments within the timeframe approved in the Remedial Design Work Plan. If you have any questions or comments regarding this letter, please contact me at (312) 353-4150 or via email at desai.sheila@epa.gov.

Sincerely,

Sheila Desai

Sheila Desai
Remedial Project Manager

Enclosure

cc: Michael Haggitt, Illinois EPA
Rachel Grand, CH2M Hill

EPA COMMENTS ON PRELIMINARY DESIGN REPORT
DATED DECEMBER 2015
OLD AMERICAN ZINC PLANT SITE
FAIRMONT CITY, ILLINOIS

GENERAL COMMENTS

1. Provide list of proposed specifications, and a complete list of proposed drawings.

SPECIFIC COMMENTS

1. **Section 1.1, 6th Bullet**: Please provide the following drawings:
   - Individual drawings for each of the impacted off-site properties, including structures, utilities, excavation depths, and restoration.
   - Removal areas and depths within Rose Creek, access points and restoration details.
   - Restoration details for the proposed and existing ditches.
   - Excavation and restoration details for the outfall(s).
   - Provide restoration details for consolidation area cap, and other facility areas.

   Please provide the following calculations:
   - Volume calculations for all excavations and required import/borrow, including facility area, offsite properties, ditches, outfalls, and drainage ways.
   - Stormwater calculations for existing ditches and Rose Creek.
   - Soil erosion calculations for consolidation area.
   - Calculations estimating infiltration through the consolidation cap, and justify whether a leachate collection system is needed or not needed.
   - Slope stability calculations for critical sections of the consolidation cell.

2. **Section 4.3.3**: The text implies new ditches will be 5 feet wide, however, Drawing 7 shows ditches to be 15 feet wide and the stormwater calculations are performed for a ditch that was 15 feet wide. Please clarify. Additionally, drawings show a new 15 foot wide ditch which discharges into existing 9 foot wide ditch (no calculations provided, and then into Rose Creek (no calculations provided), is this correct?

3. **Section 4.3.11**: Heading jumps from 3rd level to 5th level. Instead of generally suggesting ARARs will be met, list each ARAR and specifically detail how the RD will meet it.

4. **Figure 4:** The base layers should be legible. If not feasible, label Kingshighway, I-55, Old Cahokia Creek and any other relevant points on the map. Recommend changing the color of Kingshighway to a color other than red (same color as alleyways requiring soil removal). The scale of the various layers should be consistent (the background layer has a different scale shown in the lower left hand corner than what is in the legend). Explain what the asterisk after note 2 means.

5. **Appendix A, Drawing 1:** Facility Area Existing Conditions: The word "residential" is misspelled in the stockpile label.

6. **Appendix A, Drawing 4:** Confirm that borings used actually extend to the bottom of the source material, and show the bottom of the source material, not just the bottom of the boring. Example, Boring SB-17-SW did not extend through the source material, and was terminated in the source material, but data is being used to represent the source material bottom.

7. **Appendix A, Drawing 6:** On the left side, extend cap down to meet clay surface (see figure below):